

ABSTRACT

An electrode material for electrical discharge machining made of a W-Cu alloy containing at least 40% by weight of W (1), at most 15% by weight of an additional element or a compound thereof (3), and a balance of Cu (2), contains, as the additional element or the compound thereof, at most 10% by weight of particles selected from an alkali metal element, an alkaline-earth metal element and a rare-earth element, and an oxide, a hydroxide, a nitride, a boride and a sulfide of the elements. For example, the additional element or the compound thereof is an oxide or a hydroxide of each of Ba, Nd and Ce. The particles have a mean particle diameter of less than $3\mu\text{m}$ or a mean interparticle spacing of at most $20\mu\text{m}$. At least 30% of W (1) particles contained in the alloy preferably have a particle diameter of at most $1\mu\text{m}$. In addition, not more than 10% by weight of Ni can further be contained. According to the present invention, there can be provided an electrode material for electrical discharge machining which causes less electrode wear and attains higher machining rate, and is excellent in electrical discharge machining property.